**Ronald Mera**

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**EDUCATION**

**SUNY New Paltz – New Paltz, NY** *August 2017 - May 2021*

Bachelor of Science, Electrical Engineer; Cumulative GPA: 3.2/4.0

Relevant Courses: C++, Computer Simulations, Microcontroller System Design, Control System, Numerical Methods (MATLAB)

Dean’s List (Fall 2020, Spring 2018)

**CUNY John Jay College – New York, NY** *August 2016 - May 2017*

Computer Science; Cumulative GPA: 3.7/4.0

**SKILLS**

**Technical**: MongoDB, ReactJS, NodeJS, GraphQL, Git, REST API, HTML5/CSS3; Proficient in MATLAB, Python, C, C++, Java, JavaScript

**LinkedIn Learning Certifications:** JavaScript Essential Training, Learning ECMAScript 6+ (ES6+), Programming Foundations: Object-Oriented Design, Learning Java, Programming Foundations: Data Structures and Algorithms

**PROJECTS**

**BLOG PROJECT** *January 2022*

* Engineered a full-stack web application within 2 months utilizing different front-end and back-end technologies (MERN stack)
* Optimized usability and simplicity to the user interface with front-end technologies such as React.js
* Constructed a REST API using Node.js and MongoDB to properly display data on the user interface with HTTP request methods with MongoDB database
* Enhanced blog application using JavaScript debugger in Visual Studio Code for different bugs and edge cases

**APPOINTMENTS PROJECT** *August 2021*

* Built an application using React framework with fundamental knowledge of HTML5 and CSS3
* Designed a user interface that allows users to search for different appointments through filtering names, dates, and times
* Created functions in web application with ECMAScript 6+ and knowledge of data structures and algorithms

**COVID-19 WEARABLE DEVICE** *May 2021*

* Collaborated with a team of 6 engineers to assemble a wearable device that detects improper posture from user
* Acquired and applied necessary knowledge in Swift and Objective-C within 4 months to create a Bluetooth application for the wearable device
* Programmed sensors in C through an STM32 board for proper functionality
* Applied serial communication with an I2C bus connection that allowed sensors to communicate with each other while using Bluetooth communication to manipulate vibration sensitivity at 3 different levels

**PARTIAL DIFFERENTIAL MATLAB CODE** *May 2021*

* Developed a program in MATLAB with a team of 2 engineers that solved real-world problems that involved partial differential equations
* Implemented 3 numerical methods that properly utilized partial differential equations to solve different real-world problems with fundamental knowledge of data structures in algorithms

**EXPERIENCE**

**SUNY New Paltz - New Paltz, NY**

*SUNY New Paltz Intern May 2019 – July 2019*

* Assisted a team of 5 engineers to optimize prototype water turbines using SolidWorks
* Analyzed and compared data from the top 3 most effective turbine designs in the past 2 years
* Improved turbine designs by decreasing manufacturing cost, increasing the energy efficiency of initial turbines by approximately 30% and helping improve marine life safety